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FLORA SURVEY OF THE MORESBY RANGE, AUGUST 1983

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ABSTRACT

A comprehensive list of the 417 vascular plants recorded from the Moresby Range in August 1983 is presented. An analysis of the floristic composition of the vegetation of this Range is given. Brief notes on the physical features, land use and climate of the Range area are also provided.

INTRODUCTION

The survey area (Figure 1) is located northeast of Geraldton extending from the Howatharra Hills in the north to Mount Fairfax in the south and Nanson in the east. The Northwest Coastal Highway forms the western boundary. The landscape is mainly high flat topped mesas surrounded by wheat and sheep farms and some hobby farms in the west. This area was selected for study because the flora was considered to be under-collected and poorly understood as well as being possibly rich in rare and endemic species.

The Range is the western edge of the

Victoria Plateau, whose lateritic mesas are dissected by deep gorges of old river systems (Playford *et al.* 1970). Thin sandy soils overlay laterite or sandstone and have a vegetation cover ranging from low to high shrublands. The younger alluvial gorge soils support low woodlands or forests which are of limited extent and are mostly very open due to the shallow depth and occurrence of these soils and the competition for limited moisture.

The climate of the area is influenced by the southwesterly weather patterns dominated by westerly winter fronts. To a lesser extent tropical cyclones from the north

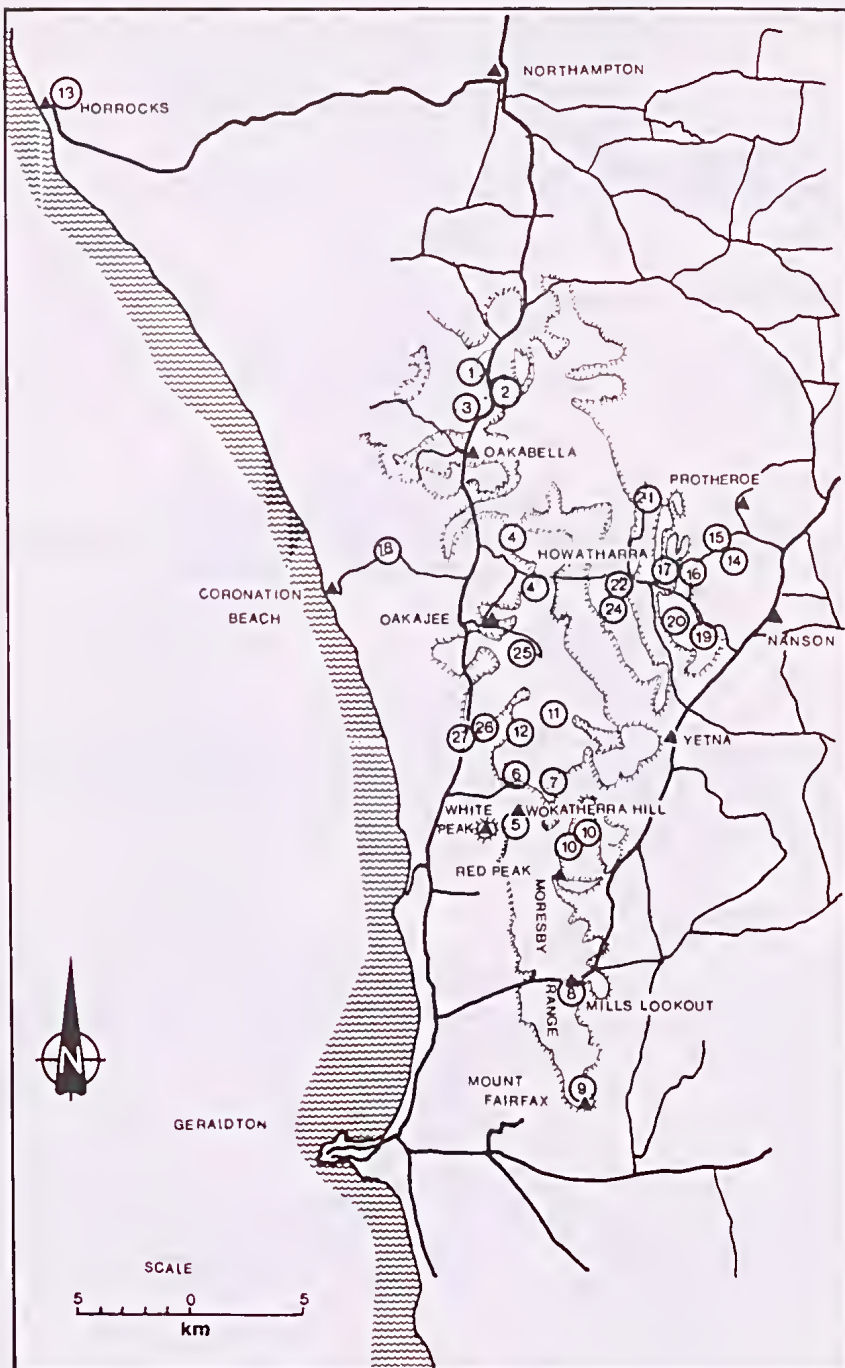


Figure 1. Map of the study area showing location of the survey sites.

during the summer months may result in limited summer rainfall. The annual rainfall ranges from 457–508 mm near the coast to 305–356 mm further inland, occurring mainly in the winter. During the summer months the area is subjected to warm dry easterly winds with temperatures commonly in excess of 38° C which may be influenced in part by the proximity of the coast.

Inaccessibility of the area has so far protected a large proportion of the vegetation from clearing for agriculture and other activities. Much of the survey area consists largely of uncleared kwongan communities occurring mainly on the slopes. Many of the larger mesas have been cleared for farming and portions of others used for gravel or recreation. The mesa slopes tend to remain protected by both their steepness and the common occurrence of *Gastrolobium oxylobioides* (Champion Bay Poison). Since this survey, the area fronting the footslopes on the western edge of the range has been released as building sites following a residential land capacity study (Dye *et al.* 1990).

METHODS

Survey sites shown on Figure 1 were selected to represent the widest possible range of habitats. A total of 27 sites were selected and as many flowering species that could be observed were sampled in each site. Eleven sites were selected on both the eastern and western edges of the range covering the whole area. The selection of these sites was dependent on the level of access and the goodwill of several property owners. The remaining five sites were established off the Range to give an indication of the flora that we may encounter in the area. This information enabled us to recognise species endemic to the Range. Six structural formations were recognized and the plant species of each collected. These vegetation classifications, soil types and survey sites are listed in Table 1.

DISCUSSION

A total of 417 species from 74 families (Appendix 1) were recorded for the area, of which 16 were new records or range extensions, 3 endemic, 4 poorly

Table 1. List of vegetation and soil types for each of the recording sites

VEGETATION TYPE	SOIL TYPE	SITES
Open Scrub	BCS,LS,RCS,SC	1–2,4,6–7,10–11, 12,15–22,24–26
Open Heath	BCS	3,5
High Shrubland	RCS,TSD	8,13
Low Open Forest	SC	14
Low Open Woodland	BCS	4
Closed Scrub	BCS	27
Degraded	RCS,TSD	9,23

BCS = Brown Clayey Sand, RCS = Red Clayey Sand, SC = Sandy Clay, TSD = Tamala Sand Dune, LS = Lateritic Sands

collected and the remaining 340 generally distributed in southwest Western Australia. Weeds and naturalised species occurring in this area totalled 24. Examination of the Herbarium and previously published records (McFarland 1977) revealed another 88 species not found during the present survey. These extra species (A) have been included in Appendix 1.

The total number of genera and species of the major families are listed in Table 2.

Family	Genera	Species
Asteraceae	27	33
Caesalpinaceae	3	8
Cyperaceae	5	10
Goodeniaceae	6	14
Mimosaceae	1	19
Myrtaceae	12	37
Papilionaceae	18	29
Poaceae	18	20
Proteaceae	8	23
Rutaceae	4	9
Sterculiaceae	6	10

The list in Appendix 1 indicates a dominance of open scrub (Kwongan) occurring on a wide range of soil types for most of the survey area. The Kwongan community of this area is unique as it occurs on the steep mesa side slopes rather than the typically flat sandplain associations (Beard 1990). With the exception of the two degraded areas the remaining

vegetation types were usually associated with localised geological features.

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Appendix 1

List of the flora of the Moresby Ranges. Numbers 1-27 are collecting sites. A = Species found in the area but not collected during this survey. Introduced species are marked with an asterisk *.

Adiantaceae	
<i>Cheilanthes</i>	
<i>austrotenuifolia</i>	1 2 3 6 7 8 10
aff. <i>austrotenuifolia</i>	1
Cupressaceae	
<i>Callitris</i>	
<i>glaucohylla</i>	A
Juncaginaceae	
<i>Triglochin</i>	
<i>calcitrapa</i>	8 19 20
<i>centrocarpa</i>	3 6 7 22
<i>mucronata</i>	6 7 24
<i>procera</i>	24
Poaceae	
<i>Amphipogon</i>	
<i>strictus</i>	A
<i>Aristida</i>	
<i>contorta</i>	9
* <i>Avena</i>	
<i>sativa</i>	9
* <i>Briza</i>	
<i>maxima</i>	3 6 7 10
* <i>Bromus</i>	
<i>diandrus</i>	9
<i>Danthonia</i>	
<i>caespitosa</i>	A
<i>Ehrharta</i>	
<i>longiflora</i>	10
* <i>Festuca</i>	
sp.	10
* <i>Holcus</i>	
<i>setiger</i>	13
* <i>Lamarckia</i>	
<i>aurea</i>	6 8
<i>Neurachne</i>	
<i>alopecuroidea</i>	1 2 3 5 8 9 10 11 12
* <i>Pentaschistis</i>	
<i>airoides</i>	10
<i>Spinifex</i>	
<i>longifolius</i>	13
<i>Sporobolus</i>	
<i>virginicus</i>	23

<i>Stipa</i>	
<i>compressa</i>	13
<i>elegantissima</i>	A
<i>semibarbata</i>	9 19
<i>Themeda</i>	
<i>australis</i>	8 10
<i>Tripogon</i>	
<i>loliiformis</i>	25
* <i>Vulpia</i>	
<i>myuros</i>	10 23
Cyperaceae	
<i>Chorizandra</i>	
<i>enodis</i>	2
<i>Isolepis</i>	
<i>congrua</i>	10 21
* <i>prolifera</i>	10
<i>Lepidosperma</i>	
<i>scabrum</i>	A
<i>tenuis</i>	1
sp.	5
<i>Mesomelaena</i>	
<i>preissii</i>	12 13 16
<i>Schoenus</i>	
<i>brevisetis</i>	11 12
<i>odontocarpus</i>	16 19
<i>unispiculatus</i>	2 16 22
Restionaceae	
<i>Lepidobolus</i>	
<i>chaetocephalus</i>	11 12 26
<i>Loxocarya</i>	
<i>asper</i>	5
<i>flexuosa</i>	4 9
'parthenica'	11 12
Centrolepidaceae	
<i>Aphelia</i>	
<i>cyperoides</i>	22
<i>Centrolepis</i>	
<i>aristata</i>	22
Philydraceae	
<i>Philydrella</i>	
<i>pygmaea</i>	25
Dasypogonaceae	
<i>Acanthocarpus</i>	
sp.	1
<i>Lomandra</i>	
<i>effusa</i>	1
<i>maritima</i>	1
Xanthorrhoeaceae	
<i>Xanthorrhoea</i>	
<i>preissii</i>	4 6 7 8 10 14 18

Phormiaceae		Iridaceae	
<i>Stypandra</i>		* <i>Chasmanthe</i>	
<i>glauca</i>	2	<i>floribunda</i>	17
Anthericaceae		<i>Orthrosanthus</i>	
<i>Arthropodium</i>		<i>laxus</i>	2 6 7 10
<i>preissii</i>	10	<i>Patersonia</i>	
sp.	13	<i>occidentalis</i>	7
<i>Borya</i>		Orchidaceae	
<i>nitida</i>	1 5 8 10	<i>Caladenia</i>	
<i>Caesia</i>		<i>amplexans</i>	A
<i>parviflora</i>	1 2 5 8 9 10 11 12	<i>denticulata</i>	4
<i>Chamaescilla</i>		<i>filamentosa</i>	3 25
<i>corymbosa</i>	2 6 7 10	<i>flava</i>	2 6 7 10
<i>Laxmannia</i>		<i>gemmata</i>	10
<i>omnifertilis</i>	11 12	<i>patersonii</i>	
<i>sessiliflora</i>	2	var. <i>longicauda</i>	2
<i>Sowerbaea</i>		<i>radialis</i>	7
<i>laxiflora</i>	1 2 5 8 10	<i>reptans</i>	19
<i>Thysanotus</i>		<i>Diuris</i>	
<i>manglesianus</i>	2 6 10 11 12 13	<i>longifolia</i>	1 2 10
<i>Tricoryne</i>		<i>Eriochilus</i>	
<i>elatior</i>	10	<i>dilatatus</i>	9
Colchicaceae		<i>Leporella</i>	
<i>Burchardia</i>		<i>fimbriata</i>	2
<i>umbellata</i>	2 6 7 8 10	<i>Lyperanthus</i>	
<i>Wurmbea</i>		<i>nigricans</i>	16
<i>densiflora</i>	A	<i>Prasophyllum</i>	
<i>dilatata</i>	2 10	<i>cyphochilum</i>	4
<i>monantha</i>	1 4	<i>fimbria</i>	3 11 12
Haemodoraceae		<i>macrostachyum</i>	
<i>Anigozanthos</i>		var. <i>ringens</i>	5 6 7
<i>humilis</i>	2 6 7	<i>Pterostylis</i>	
<i>Conostylis</i>		<i>vittata</i>	
<i>aculeata</i>	11 12	var. <i>vittata</i>	4 11 12
<i>androstemma</i>	22	<i>Thelymitra</i>	
<i>prolifera</i>	1 2 5 10 14	<i>antennifera</i>	2 6 7 10
<i>Haemodorum</i>		<i>macmillanii</i>	21
<i>laxum</i>	5	<i>nuda</i>	21
<i>Tribonanthes</i>		Casuarinaceae	
<i>violacea</i>	2	<i>Allocasuarina</i>	
Hypoxidaceae		<i>campestris</i>	2 6 7 8 10
<i>Hypoxis</i>		<i>huegeliana</i>	4
<i>hookeri</i>	6 7	<i>humilis</i>	11 12
<i>leptantha</i>	A	Urticaceae	
<i>occidentalis</i>	1 2 4 5 8 10	<i>Parietaria</i>	
Dioscoreaceae		<i>debilis</i>	5 13
<i>Dioscorea</i>		Proteaceae	
<i>hastifolia</i>	1 5	<i>Banksia</i>	
		<i>menziesii</i>	11 12

Conospermum		Halosarcia	
stoechadis	15	indica	
triplinervium	15	subsp. indica	16
Dryandra		Maireana	
ashbyi	3 5 10	planifolia	24
sessilis	1 6 7 9	Rhagodia	
Grevillea		baccata	4
argyrophylla	13	gaudichaudiana	25 26
bracteosa	A	preissii	8 11 12 13
eristostachya	11 12	Salsola	
intricata	2	kali	13
pinaster	2 5 8	Amaranthaceae	
triloba	1 3 5 9	Ptilotus	
Hakea		drummondii	10 24
costata	17	obovatus	24
erinacea	2 5	polystachyus	11 12
lissocarpa	A	villosiflorus	13
prostrata	1	Gyrostemonaceae	
pynoneura	A	Gyrostemon	
recurva	1 5 10	ramulosus	22
trifurcata	2 7 8 10	Tersonia	
Isopogon		cyathiflora	11 12 20 22
divergens	2 4 8 10	Aizoaceae	
Petrophile		Carpobrotus	
conifera	2 6 7 10	sp.	5
macrostachya	11 12	Tetragonia	
media	15	diptera	13
Synaphea		Portulacaceae	
spinulosa	6 7 10	Calandrinia	
Santalaceae		calyptrata	13
Exocarpos		corrigioloides	13
sparteus	6 7 8 13	sp.	2
Leptomeria		Caryophyllaceae	
spinosa	16	*Petrohragia	
Santalum		velutina	3 8
acuminatum	4	*Silene	
Loranthaceae		gallica	6 7 8 20
Amyema		*Spergularia	
fitzgeraldii	3	rubra	A
preissii	1	Ranunculaceae	
Nuytsia		Clematis	
floribunda	15	microphylla	10 13
Polygonaceae		Lauraceae	
Muehlenbeckia		Cassytha	
adpressa	2 3 10	glabella	A
Chenopodiaceae		racemosa	13
Atriplex		Brassicaceae	
isatidea	13	*Brassica	
Enchylaena		tournefortii	10 11
tomentosa	1 2 8 10		

* <i>Raphanus</i>		<i>rostellifera</i>	13 8 9 13
<i>raphanistrum</i>	7	<i>saligna</i>	5 7 10 11 12 16 22 24
Droseraceae		<i>sphacelata</i>	14 19
<i>Drosera</i>		<i>tetragonophylla</i>	18 9
<i>glanduligera</i>	24	<i>ulicina</i>	2 5
<i>macrantha</i>	2 8 14	<i>xanthina</i>	13
<i>menziesii</i>	11 12	sp.	2
<i>menziesii</i>		Caesalpiniaceae	
subsp. <i>thysanosepala</i>	11 12	<i>Labichea</i>	
<i>neesii</i>		<i>lanceolata</i>	A
subsp. <i>borealis</i>	25	<i>teretifolia</i>	11 12
<i>stolonifera</i>		sp.	6 7 11 12
subsp. <i>humilis</i>	11 12	<i>Senna</i>	
sp.	2 7 9	<i>artemisioides</i>	
Crassulaceae		subsp. <i>filifolia</i>	6 7
<i>Crassula</i>		<i>glutinosa</i>	
<i>colorata</i>	5 9	subsp. <i>chatelainiana</i>	19 23
* <i>decumbens</i>	9	Papilionaceae	
* <i>natans</i>	2	<i>Burgesia</i>	
Pittosporaceae		<i>aphyllum</i>	5 8 10 11 12
<i>Billardiera</i>		<i>Brachysema</i>	
<i>bicolor</i>	A	sp.	14
<i>Bursaria</i>		<i>Bossiaea</i>	
<i>occidentalis</i>	A	<i>eriocarpa</i>	16
<i>Pittosporum</i>		<i>spinosa</i>	18 22
<i>phylliraeoides</i>	11 12	<i>Chorizema</i>	
Cunoniaceae		<i>aciculare</i>	10 11 12
<i>Aphanopetalum</i>		<i>ericifolium</i>	2 5 8
<i>clematideum</i>	5 9	<i>Daviesia</i>	
Surianaceae		<i>divaricata</i>	11 12
<i>Stylobasium</i>		<i>Gastrolobium</i>	
<i>australe</i>	16	<i>oxylobioides</i>	2 6 7 8 10 11 12
<i>spathulatum</i>	13	<i>spinsum</i>	
Mimosaceae		var. <i>triangulare</i>	2 5 10
<i>Acacia</i>		<i>Glycine</i>	
<i>acuminata</i>	1 4 8 9 21	<i>canescens</i>	10
<i>alata</i>		<i>Gompholobium</i>	
var. <i>biglandulosa</i>	5 9	<i>aristatum</i>	6 7 19
<i>bidentata</i>	6	<i>marginatum</i>	22
<i>blakelyi</i>	A	<i>Isotropis</i>	
<i>congesta</i>	1 6 7	sp.	8 13
<i>ericifolia</i>	A	<i>Jacksonia</i>	
<i>guinetii</i>	11 12	<i>nematoclada</i>	24
? <i>guinetii</i>	5 8 10	<i>sternbergiana</i>	1 6 7 9
<i>idiomorpha</i>	10	<i>ulicina</i>	7 11 12
<i>lasiocarpa</i>	17	<i>Kennedia</i>	
<i>neurophylla</i>	10 24	<i>prostrata</i>	3
<i>oxyclada</i>	11 12	<i>Lotus</i>	
<i>restiacea</i>	4 19	<i>australis</i>	13
		<i>Mirbelia</i>	
		<i>microphylla</i>	A

<i>multicaulis</i>	6 7 10	<i>Ricinocarpus</i>	
<i>ramulosa</i>	2 5 7 8 10	<i>psilocladus</i>	28
<i>spinosa</i>	16	Stackhousiaceae	
<i>Nemcea</i>		<i>Stackhousia</i>	
<i>sp.</i>	16	<i>monogyna</i>	11 12
<i>Swainsona</i>		<i>Tripterococcus</i>	
<i>canescens</i>		<i>brunonis</i>	2 11 12
<i>var. canescens</i>	23	Sapindaceae	
<i>Templetonia</i>		<i>Diplopeltis</i>	
<i>biloba</i>	10	<i>huegelii</i>	
<i>Trifolium</i>		<i>var. subintegra</i>	3 7 8 11
<i>*campestre</i>	67	<i>petiolaris</i>	11 12 23 26
<i>*subterraneum</i>	9	<i>Dodonaea</i>	
<i>sp.</i>	67	<i>ericoides</i>	A
<i>Viminaria</i>		<i>inaequifolia</i>	4 5 8 10 11 12
<i>junceae</i>	A	<i>larraeoides</i>	5
Geraniaceae		<i>viscosa</i>	
<i>Erodium</i>		<i>ssp. angustissima</i>	A
<i>*botrys</i>	1 5 8 9 10	Rhamnaceae	
<i>*cicutarium</i>	13	<i>Cryptandra</i>	
Oxalidaceae		<i>arbutiflora</i>	5 10
<i>Oxalis</i>		<i>gracilipes</i>	4
<i>corniculata</i>	13	<i>leucophracta</i>	5
Zygophyllaceae		<i>aff. leucophracta</i>	11 12
<i>Zygophyllum</i>		<i>sp.</i>	2 6 7
<i>billardierei</i>	13	<i>Trymalium</i>	
<i>fruticosum</i>	13	<i>ledifolium</i>	5
Rutaceae		<i>wichurae</i>	3 22
<i>Boronia</i>		Vitaceae	
<i>coerulescens</i>	16	<i>Clematicissus</i>	
<i>cymosa</i>	2 5 8 10	<i>angustissima</i>	1
<i>ramosa</i>		Malvaceae	
<i>var. ramosa</i>	11 12	<i>Hibiscus</i>	
<i>scabra</i>	A	<i>drummondii</i>	11 12 25
<i>Diplolaena</i>		<i>huegelii</i>	
<i>dampieri</i>	67	<i>var. wrayae</i>	11 12
<i>grandiflora</i>	13	<i>Lawrencia</i>	
<i>microcephala</i>	A	<i>squamata</i>	23
<i>Eriostemon</i>		<i>Sida</i>	
<i>sp.</i>	27	<i>calyxhymenia</i>	10 13
<i>Geleznovia</i>		<i>sp.</i>	1
<i>verrucosa</i>	11 12	Sterculiaceae	
Euphorbiaceae		<i>Commersonia</i>	
<i>Amperea</i>		<i>pulchella</i>	11 12 22
<i>sp.</i>	13	<i>sp.</i>	23
<i>Euphorbia</i>		<i>Guichenotia</i>	
<i>boophthona</i>	6 7 8 24	<i>angustifolia</i>	2 4 5 8 9
<i>Phyllanthus</i>		<i>macrantha</i>	10
<i>calycinus</i>	13	<i>micrantha</i>	A
		<i>sarotes</i>	A

<i>Keraudrenia</i>		<i>pyriformis</i>	16
<i>hermanniifolia</i>	4 11 12 24	<i>redunca</i>	2 10
<i>Lasiopetalum</i>		<i>Malleostemon</i>	
<i>oppositifolium</i>	9 13 23	<i>roseus</i>	10
<i>Rulingia</i>		<i>Melaleuca</i>	
<i>cygnorum</i>		<i>cardiophylla</i>	A
var. <i>borealis</i>	13	<i>depressa</i>	11 12
<i>Thomasia</i>		<i>megacephala</i>	3 6 7 10
sp.	5 8 10	<i>radula</i>	2 5 8 10
Dilleniaceae		<i>scabra</i>	2 24
<i>Hibbertia</i>		<i>uncinata</i>	10 25
<i>acerosa</i>	3	<i>viminea</i>	1 6 7
<i>enervia</i>	14 19	aff. <i>viminea</i>	25
aff. <i>hypericoides</i>	2 8 10 11 12	<i>Micromyrtus</i>	
<i>potentilliflora</i>	1 2 5 8 9 10	<i>racemosa</i>	
<i>spicata</i>	13	var. <i>racemosa</i>	2 4
Violaceae		<i>Scholtzia</i>	
<i>Hybanthus</i>		<i>ciliata</i>	2 5 6 7 10
<i>floribundus</i>	2 3	<i>parviflora</i>	3 15
Thymelaeaceae		<i>uberiflora</i>	12 13
<i>Pimelea</i>		<i>Thryptomene</i>	
<i>argentea</i>	5	<i>hyporhytis</i>	5 10
aff. <i>floribunda</i>	5 11 12	<i>Verticordia</i>	
<i>gilgiana</i>	23	<i>densiflora</i>	A
<i>imbricata</i>	10	<i>monadelphica</i>	24
<i>microcephala</i>	1 6 7 9	<i>picta</i>	10 27
Myrtaceae		<i>penicillaris</i>	A
<i>Baeckea</i>		<i>preissii</i>	2 5 10
<i>grandiflora</i>	11 12	Haloragaceae	
<i>Calothamnus</i>		<i>Gonocarpus</i>	
<i>homalophyllus</i>	2 5 11 12	<i>nodulosus</i>	10
<i>sanguineus</i>	11 12	<i>Glischrocaryon</i>	
<i>Calytrix</i>		<i>aureum</i>	5 8 10 11 12
<i>depressa</i>	6 7 13 24	Apiaceae	
<i>strigosa</i>	11 12	<i>Daucus</i>	
<i>tenuifolia</i>	A	<i>glochidiatus</i>	11 12 24
<i>Darwinia</i>		<i>Hydrocotyle</i>	
<i>paucifolia</i>	20	sp.	9
<i>Eremaea</i>		<i>Neosciadium</i>	
sp.	15	<i>glochidiatum</i>	23
<i>Eucalyptus</i>		<i>Trachymene</i>	
' <i>blaxellii</i> '	6	<i>cyanopetala</i>	23
<i>camaldulensis</i>	6 7	<i>ornata</i>	11 12
<i>obtusiflora</i>	26	<i>pilosa</i>	1 16 22
<i>ebbanoensis</i>	10	Epacridaceae	
<i>flocktoniae</i>	5	<i>Astroloma</i>	
<i>gittinsii</i>	24	aff. <i>serratifolium</i>	1 2 6 7 8
<i>gracilis</i>	2	<i>Leucopogon</i>	
<i>loxophleba</i>	7 10 11 12 24 27	<i>assimilis</i>	11 12
<i>oraria</i>	6 7		

aff. <i>assimilis</i>	16	Solanaceae	
aff. <i>revolutus</i>	2 10	<i>Anthocercis</i>	
<i>Lysinema</i>		<i>littorea</i>	13
<i>ciliatum</i>	11 12	<i>Lycium</i>	
Primulaceae		<i>*ferocissimum</i>	6 7 9
<i>*Anagallis</i>		<i>Solanum</i>	
<i>arvensis</i>	13	<i>ellipticum</i>	1
Oleaceae		<i>oldfieldii</i>	2 4 8 11 12
<i>Jasminum</i>		<i>orbiculatum</i>	4
<i>calcareum</i>	5 24	<i>*nigrum</i>	5 10
Loganiaceae		Scrophulariaceae	
<i>Logania</i>		<i>*Bellardia</i>	
sp.	13	<i>trixago</i>	A
<i>Mitrasacme</i>		<i>*Parentucellia</i>	
<i>paradoxa</i>	10 11	<i>latifolia</i>	24
Gentianaceae		<i>*Zaluzianskya</i>	
<i>*Cicendia</i>		<i>divaricata</i>	11 12
<i>filiformis</i>	25	Orobanchaceae	
Apocynaceae		<i>*Orobanche</i>	
<i>Alyxia</i>		<i>minor</i>	A
<i>buxifolia</i>	11 12	Myoporaceae	
Convolvulaceae		<i>Eremophila</i>	
<i>Convolvulus</i>		<i>brevifolia</i>	8
<i>erubescens</i>	5	<i>glabra</i>	13
Cuscutaceae		<i>subfloccosa</i>	5 11 12
<i>Cuscuta</i>		<i>Myoporum</i>	
<i>epithymum</i>	9 10	<i>caprarioides</i>	23
Boraginaceae		<i>insulare</i>	13
<i>*Echium</i>		Plantaginaceae	
<i>plantagineum</i>	24	<i>Plantago</i>	
<i>Halgania</i>		<i>drummondii</i>	9 19
<i>littoralis</i>	13	Rubiaceae	
<i>preissiana</i>	2 5	<i>Opercularia</i>	
<i>sericiflora</i>	11 12	<i>spermacoceae</i>	5
Chloanthaceae		<i>vaginata</i>	2 6 7 10
<i>Lachnostachys</i>		Lobeliaceae	
<i>eribotrya</i>	15	<i>Isotoma</i>	
<i>Pityrodia</i>		<i>hypocrateriformis</i>	A
<i>atriplicina</i>	A	Goodeniaceae	
<i>hemigenioides</i>	15	<i>Brunonia</i>	
<i>loxocarpa</i>	12	<i>australis</i>	A
<i>verbascina</i>	11 12	<i>Dampiera</i>	
Lamiaceae		<i>altissima</i>	10
<i>Hemiandra</i>		<i>lindleyi</i>	10
<i>rubriflora</i>	16	<i>linearis</i>	24
<i>Hemigenia</i>		sp.	1 2 5 8 9 10
<i>diplanthera</i>	4	Goodenia	
<i>Westringia</i>		<i>berardiana</i>	5 11 12 22
<i>rigida</i>	13		

<i>pinnatifida</i>	19	<i>lindleyi</i>	210
<i>Lechenaultia</i>		<i>macranthum</i>	11 12
<i>linarioides</i>	16	<i>Helipterum</i>	
<i>Scaevola</i>		<i>manglesii</i>	6 7 10
<i>canescens</i>	A	<i>roseum</i>	3 5 24
<i>humifusa</i>	10	<i>spicatum</i>	2 5 10
<i>lanceolata</i>	2 3 5 8 9 10 25	<i>Hyalosperma</i>	
<i>porocarya</i>	3 13 25	<i>glutinosum</i>	
<i>spinescens</i>	5 8 9	subsp. <i>glutinosum</i>	10
<i>tomentosa</i>	13	<i>glutinosum</i>	
<i>Velleia</i>		subsp. <i>venustum</i>	2 8
<i>rosea</i>	6 7 8 9	<i>Hypochaeris</i>	
Stylidiaceae		<i>glabra</i>	9
<i>Stylidium</i>		<i>Isoetopsis</i>	
<i>bulbiferum</i>	27	<i>graminifolia</i>	5 9
<i>elongatum</i>	2 5 6 7 8 10	<i>Lagenifera</i>	
<i>emarginatum</i>		<i>huegelii</i>	4 9
subsp. <i>emarginatum</i>	6 7	<i>Olearia</i>	
<i>leptophyllum</i>	15	<i>homolepis</i>	11 12
<i>petiolare</i>	10	* <i>Osteospermum</i>	
<i>repens</i>	16	<i>clandestinum</i>	5 8 10
Asteraceae		<i>Podolepis</i>	
* <i>Arctotheca</i>		<i>capillaris</i>	7 13
<i>calendula</i>	2 3 4 5 10 25	<i>lessonii</i>	A
<i>Brachycome</i>		<i>Podotheca</i>	
<i>iberidifolia</i>	5 14	<i>angustifolia</i>	A
<i>perpusilla</i>	5 8 9 11 12	<i>gnaphalioides</i>	A
sp.	2	<i>Quinetia</i>	
<i>Calocephalus</i>		<i>urvillei</i>	24
<i>drummondii</i>	9 19	* <i>Reichardia</i>	
<i>Calotis</i>		<i>tingitana</i>	13
<i>hispidula</i>	6 7 8 9	<i>Rutidosia</i>	
<i>Cephalopterum</i>		<i>multiflora</i>	22
<i>drummondii</i>	4	<i>Schoenia</i>	
<i>Ceratogyne</i>		<i>cassiniana</i>	24
<i>obionoides</i>	10 11 20	<i>Senecio</i>	
<i>Chthonocephalus</i>		<i>glossanthus</i>	2 5
<i>pseudevax</i>	6 7 10	<i>hispidulus</i>	11 12
sp.	9	<i>lautus</i>	
<i>Cotula</i>		ssp. <i>dissectifolius</i>	5 11 12
<i>coronopifolia</i>	5 6 25	* <i>Sonchus</i>	
* <i>Dittrichia</i>		<i>oleraceus</i>	24
<i>graveolens</i>	A	* <i>Ursinia</i>	
<i>Gilberta</i>		<i>anthemoides</i>	11 12
<i>tenuifolia</i>	A	<i>Vittadinia</i>	
<i>Helichrysum</i>		<i>dissecta</i>	24
<i>ambiguum</i>	5	<i>Waitzia</i>	
		<i>acuminata</i>	A
		<i>aurea</i>	24